

The present form is, however, not like anything which has been seen by me heretofore. Its warm brown color, smooth, polished surface, lack of any sort of persistent periostracal fringes, and narrow, though permeable umbilicus, are features serving to set it quite distinctly apart.

EXPLANATION OF FIGURES.

Fig. 1, 2.—*Polygyra sierrana* n. sp. Type, from near Weed, Shasta County, California; x 3.

Fig. 3, 4.—*Polygyra columbiana shasta* n. subsp. Type from La Moine, Shasta County, California; x 2.

MISCELLANEOUS NOTES ON LAND MOLLUSCA OF THE MADEIRA IS.

BY T. D. A. COCKERELL.

Though Porto Santo is the home of so many endemic snails, there still seems to be room for aliens from Europe. *Cochlicella acuta* is abundant in certain spots north of Villa Baleira. *Helix pisana* swarms everywhere. In a spring in the valley of the Serra do Dentro I found specimens of a small Hydrobiid, which Dr. Pilsbry has kindly identified as *Pseudamnicola similis* (Drap.). This species was already known from Madeira, but is the first record of a freshwater shell from Porto Santo.

In 1848 (Proc. Zool. Soc. Lond., p. 110) Pfeiffer described some shells from the Cuming collection, including a species *Helix calcarea*, collected by Count Vargas in Porto Santo. This shell has since been ignored; Wollaston does not mention it. Pfeiffer subsequently listed it as a fossil. In the British Museum I found the type specimen. Mr. Tomlin, to whom I showed it, recognized Pfeiffer's writing on the label underneath the slab. It is a recent shell, and is a form of *Helix pisana*, white without bands. The name *calcarea* cannot be used even in a varietal sense, as there is an earlier *H. calcarea* Born.

Also in the British Museum, from the Cuming collection are five specimens of *Vitrea miguelina* (Pfeiffer), said to be

* Plate II will appear in next issue.

from Madeira. They are only 11 mm. diameter, but Azores specimens in the Norman collection are 14 mm. The species seems to me to be the European *V. lucida*. Probably the Cuming specimens did not come from the Madeira group, as the Cumingian localities are very unreliable. I found in the Cuming collection five other Helicoids labeled as from Madeira, but all known from quite other places and, with one exception, very distinct from anything in the Madeiran fauna. The exception is *Pyramidula retexta* Shuttl., a Canarian shell resembling *P. semiplicata* (Pfr.) in appearance, but brown all over, not mottled. It must be a rare species, as Wollaston had not seen a specimen.

In the Norman collection is a subfossil *Helix ustulata* Lowe, said to be from Madeira (Rev. B. Watson). It is genuine *ustulata*, but is from the Salvages, as shown by the rest of Watson's series in the possession of Mr. Tomlin.

Punctum pygmaeum and *Vitrea crystallina* have been recorded as fossil in the Pleistocene beds at Canical, Madeira, on the authority of Boog Watson. Mr. J. R. LeB. Tomlin has Watson's specimens, and was so kind as to lend them to me for examination. Both species appear to be correctly named, though the *V. crystallina* is a single very immature shell. I do not believe, however, that they are fossil. Such shells are easily carried by the wind over the sand hills, and thus mixed with the fossils. No other collectors have been able to find these species in the Canical beds.

MOLLUSCA OF PISGAH FOREST, NORTH CAROLINA.

BY MINA L. WINSLOW.

The material on which the following list is based was collected for the Museum of Zoology, University of Michigan, during a part of the months of July and August, 1916. The Pisgah Forest region was approached by rail from Asheville to Brevard, thence by wagon to Pisgah Forest station, and by log railroad about seventeen miles northwest along the